Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – 02-Jan-2025

Time: Three Hours **Max. Marks: 100**

PHARMACOLOGY - PAPER – I (RS-2/RS-3)
Basic and General Pharmacology
Q.P. CODE: 7405

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

Answer All The Questions **10 x 10 = 100 Marks**

1. Define bioavailability. Explain the factors affecting bioavailability
2. Drug reservoirs
3. Methods of drug targeting
4. Radioimmunoassay
5. Teratogenicity
6. Phase IV clinical trials
7. Quantifying agonistic action of drugs
8. Chain and Florey
9. Paired t test
10. Pre-clinical screening of drugs

M.D. Degree Examination – 04-Jan-2025

Time: 3 Hours Max. Marks: 100

PHARMACOLOGY - PAPER – II (RS-2/RS-3)
SYSTEMIC PHARMACOLOGY - I
Q.P. CODE: 7406

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

Answer All The Questions **10 X 10 = 100 Marks**

1. **Discuss the experimental methods used to evaluate antihypertensive drugs**

   Or

   Pharmacotherapy of Inflammatory Bowel Disease.

2. Enumerate the steps of drug therapy in heart failure
3. Vasopressin analogues
4. Botulinum toxin
5. Potassium sparing diuretics
6. Drugs affecting GABA transmission
7. Drug treatment of epilepsy during pregnancy
8. Anaesthetic adjuncts
9. Lithium carbonate
10. Erythropoietin

Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – 06-Jan-2025

Time: Three Hours **Max. Marks: 100 Marks**

PHARMACOLOGY - PAPER – III - (RS-2/RS-3)
Systemic Pharmacology - II
Q.P. CODE: 7407

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions **10 x 10 = 100 Marks**

1. Gonadotropin Releasing Hormone (GnRH) analogues
2. Selective Estrogen Receptor Modulators (SERMs)
3. Anabolic steroids
4. Glucogon Like Peptide – I (GLP-1) analogues
5. Bacterial drug resistance to antimicrobial agents
6. Dapsone
7. Amphotericin – B formulations
8. Mechanism of action, uses and adverse effects of Fluoroquinolones
9. mTOR inhibitors
10. Drugs for Hepatitis-B infection

M.D. Degree Examination – 08-Jan-2025

Time: Three Hours **Max. Marks: 100 Marks**

PHARMACOLOGY - PAPER – IV
(RS-2/RS-3)
CLINICAL PHARMACOLOGY
Q.P. CODE: 7408

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions **10 x 10 = 100 Marks**

1. Informed consent in research
2. Orexin receptor modulators
3. Evaluation of Anti epileptic drugs
4. Alternative to animal experiments
5. Newer anti-anginal drugs
6. Pharmacovigilance
7. Phase II clinical trial
8. Randomization
9. Newer / repurposed drugs in tuberculosis
10. Resurgence of Thalidomide

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – 26-May-2025

Time: Three Hours **Max. Marks: 100**

PHARMACOLOGY - PAPER – I (RS-2/RS-3)
Basic and General Pharmacology
Q.P. CODE: 7405

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

Answer All The Questions **10 x 10 = 100 Marks**

1. Drug – receptor interactions
2. Prodrugs and their clinical implications
3. Targeted drug delivery systems
4. Principles of High Performance Liquid Chromatography (HPLC)
5. Transgenic animals
6. Double blind tests
7. Four point assay
8. Drug enantiomers
9. Student's t test
10. Essential drugs

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M.D. Degree Examination – 28-May-2025

[Time: 3 Hours] **[Max. Marks: 100]**

PHARMACOLOGY - PAPER – II (RS-2/RS-3)
SYSTEMIC PHARMACOLOGY - I
Q.P. CODE: 7406

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

Answer All The Questions **10 X 10 = 100 Marks**

1. Non-Ocular therapeutic uses of anticholinergic drugs
2. Discuss the advantages and disadvantages of atypical antipsychotics
3. Chronic Pain management and recent advances
4. Role of expectorants and mucolytics in pharmacotherapy of cough
5. Levodopa therapy - challenges and solutions
6. Role of oximes in acute intoxication by an anticholinesterase agent
7. Drugs used in the treatment of Compensated Heart Failure
8. Pharmacotherapy of Gastroesophageal Reflux Disease
9. Biologic disease modifying anti rheumatic drugs
10. Newer targets for treatment of Dyslipidemia

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – 30-May-2025

Time: Three Hours **Max. Marks: 100**

PHARMACOLOGY - PAPER – III (RS-2/RS-3)

Systemic Pharmacology - II

Q.P. CODE: 7407

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

Answer All The Questions **10 x 10 = 100 Marks**

1. Drugs used in mycobacterium avium complex
2. Post antibiotic effect-implications in therapeutics
3. Enfuvirtide
4. Monoclonal antibodies in cancer therapy
5. Macrolides
6. Selective estrogen receptor modulators (SERMs)
7. Calcineurin inhibitors
8. **Tocolytics.**
9. **Second Generation Cephalosporins.**
10. **Pharmacotherapy of Diabetic Ketoacidosis.**

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M.D. Degree Examination – 02-Jun-2025

Time: Three Hours **Max. Marks: 100 Marks**

PHARMACOLOGY - PAPER – IV
(RS-2/RS-3)
CLINICAL PHARMACOLOGY
Q.P. CODE: 7408

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions **10 x 10 = 100 Marks**

1. Describe several phases of clinical evaluation of newly introduced drugs. What are the problems likely to be met with?
2. Precision Medicine
3. Alternatives to the use of animals in drug research
4. Declaration of Helsinki
5. Reverse pharmacology
6. Computer aided drug designing
7. Clinical trial registry
8. Screening of new anti-cancer drug
9. Newer drug targets in dyslipidemia
10. Applications of Area under the curve

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – 24/Sep/2025

Time: Three Hours **Max. Marks: 100 Marks**

PHARMACOLOGY - PAPER – I (RS-2/RS-3)
Basic and General Pharmacology
Q.P. CODE: 7405

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions **10 x 10 = 100 Marks**

1. Type-I and Type-II errors in biostatistics
2. Enzyme inhibition and its consequences
3. Chronokinetics
4. Describe the types of receptor antagonism with suitable diagram
5. Describe the types of data with examples and relevant method of representation
6. Adverse impact of drug in the ecosystem and preventive measures
7. Sir Henry Dale
8. Drug induced ocular toxicity
9. Write in detail on 'Safe Drug Therapy' during lactation
10. Placebo

M.D. Degree Examination – 26/Sep/2025

[Time: 3 Hours] [Max. Marks: 100]

PHARMACOLOGY - PAPER – II (RS-2/RS-3)
SYSTEMIC PHARMACOLOGY - I
Q.P. CODE: 7406

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

Answer All The Questions **10 X 10 = 100 Marks**

1. Co-transmission in the Autonomic Nervous System
2. Compare β(Beta) blockers and Calcium channel blockers
3. Newer antiarrhythmic drugs
4. Z - drugs and their advantages
5. Pharmacotherapy of Inflammatory Bowel Disease
6. Adverse effects of Diuretics and measures to ameliorate toxicity
7. GINA guidelines on management of Bronchial Asthma
8. Justify the rationale of Balanced anaesthesia
9. Management of Acute and Chronic migraine; add a note on recent advances
10. Role of Haematopoietic factors in Cancer chemotherapy induced myelosuppression

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Rajiv Gandhi University of Health Sciences, Karnataka

M.D. Degree Examination – 29/Sep/2025

Time: Three Hours **Max. Marks: 100**

PHARMACOLOGY - PAPER – III

Systemic Pharmacology - II

Q.P. CODE: 7407

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions **10 x 10 = 100 Marks**

1. Agents affecting Bone Turnover
2. Multi drug therapy of HIV infections and discuss about Post Exposure Prophylaxis
3. Sargramostim
4. Glycopeptides antimicrobials
5. Latest guidelines in drug therapy of Tuberculosis in India
6. Insulin delivery devices
7. Calcineurin inhibitors
8. Current status of Hormone Replacement Therapy in Women
9. Androgen receptor modulators
10. Management of Acromegaly

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M.D. Degree Examination – 03/Oct/2025

Time: Three Hours **Max. Marks: 100**

PHARMACOLOGY - PAPER – IV
CLINICAL PHARMACOLOGY
Q.P. CODE: 7408

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

Answer All The Questions **10 x 10 = 100 Marks**

1. Clinical pharmacology of Orphan drugs
2. P-drug
3. Alternatives to the use of animals in drug research
4. Membrane transporters in drug response
5. Discuss the principles, methods, advantages and limitations of therapeutic drug monitoring
6. Recent trends in treatment of Hypertension
7. Rituximab
8. Blinding and allocation concealment in clinical trials
9. Pharmacotherapy of osteoarthritis
10. Clinical pharmacology of peptic ulcer treatment

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